CLAIMS

SUBST

1. An assembly for forming a cured-in-place lining in the region (13) of a lateral/main pipe connection, characterised in that the assembly comprises a length of tubular structure (22) for application to the main pipe surface to each side of a lateral connection pipe (12), said length of main pipe tubular structure (22) having a wall aperture (27) for register with the lateral pipe (12), and a lateral extension tubular structure (24) extending from said aperture (27) and for extending into the lateral pipe (12), said lateral tubular structure (24) and main pipe tubular structure being of cured in place type in that each comprises at least one layer of a resin absorbent material which in use is impregnated with curable synthetic resin.

2. An assembly according to Claim 1 characterised in that, the main pipe tubular structure (22) initially fabricated and provided with said aperture (27) therein and the extension tubular structure (24) is provided at one end with a collar (26) and the extension tubular structure is fed through the said aperture (27) in the main pipe tubular structure (22) so that the collar (26) lies to the inside of the main pipe tubular structure.

3. An assembly according to Claim 2, characterised in that the collar (26) is of resin absorbent material similar to that of the extension tubular structure (24).

4. An assembly according to claim 1 ~~any preceding claim~~, characterised by tailored inflation member (28) for the purposes of inflating the main pipe tubular structure (22) and the extension tubular structure (24) simultaneously.

5. An assembly according to Claim 4, characterised in that

the inflation member (28) is of a robust inflatable material such as a reinforced silicone rubber bag (28) which is defined to have a main inflation portion which lies inside the main line tubular structure (22) in use, and an inflatable arm portion (30) which lies inside the extension tubular structure (24) in use.

6. An assembly according to Claim 5, characterised in that the inflation bag (28) is designed to permit the flow of liquid along the main pipeline or passageway whilst the bag (28) is inflated.

7. An assembly according to Claim 6, characterised in that the bag (28) is provided with a central core tube (50) through which liquid can pass.

8. A method of assembling the assembly of claim 5, ~~6 or 7~~ characterised in that the inflation member (28) is deflated and the arm (30) is pushed inwardly to be inverted into the bag (28), the bag (28) is positioned inside the main tubular structure (22) which is impregnated with a curable resin, and the bag 28 is inflated so that the arm (30) everts through the extension tubular structure (24) which is also impregnated with resin, the inflation member (28) ~~inflation~~ is then deflated again, and the arm (30) is inverted into the inside of the bag (28), along with the extension tubular structure (24).

9. A method according to Claim 8, characterised in that the assembly is introduced into a main pipe with a lateral pipe until the inverted arm (30) and extension tubular structure (24) are in register with the lateral pipe and then the bag is reinflated which causes the main tubular structure (22) to be inflated against the main pipe (10) on opposite sides of the lateral pipe (12), and the extension tubular structure

(24) to be everted into the lateral pipe (12) and against the lateral pipe surface, and the assembly is maintained in this condition whilst the resin is caused or allowed to cure.

10. The method of Claim 9, characterised in that when curing has been completed, and the lining assumes a rigid condition, the bag (28) is again deflated and removed from the now remaining in place lining.

ABSTRACT

The invention provides a tailored assembly of a flexible resin absorbent material (22, 24, 26). It is in the form of a "T" and is of tubular cross section. The arms of the T are intended to lie on the surface of a main underground pipe which the leg of the T extends into a lateral pipe which connects with the main pipe. The whole assembly is soaked in curable synthetic resin and it is placed in position and held there whilst resin cures by means of an inflatable bag (28) which is located inside the assembly and is also tailored to T configuration.